#3942

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

November 8, 2011

TO:

Internal File

THRU:

Steve Christensen, Permit Supervisor

FROM:

April A. Abate, Team Lead, Hydrology/Geology (Geology (Geology))

C/041/000Z

RE:

West Lease Boreholes, Canyon Fuel Company, SUFCO Mine, C/007/0042, Task

ID #3942

SUMMARY:

The SUFCO mine (the Permittee) has requested an expedited approval to drill 4 bore holes in Mud Spring Hollow as part of the West Lease initial drilling activities. SUFCO is under an order from the Mine Safety and Health Administration (MSHA) to collect additional air sample data from behind the seals. The Permittee plans to mobilize helicopter rigs to complete the drilling of the 4 bore holes. When the boreholes are completed a down hole camera will be advanced into the older mine workings to assess the underground conditions.

The combined amount of land disturbance from these drilling activities is minimal and amounts to 0.012 acres. No pads are to be constructed and the land will be immediately reclaimed after the removal of all equipment.

RECOMMENDATIONS:

Conditional approval to install 4 boreholes via a helicopter rig should be approved provided that a follow up letter report with photodocumentation be submitted to the Division indicating that the boreholes were properly abandoned in accordance with [R645-301.631.200 - 301.641. -301.755 -301.765]

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TECHNICAL ANALYSIS:

OPERATION PLAN

MINING OPERATIONS AND FACILITIES

Regulatory Reference: 30 CFR 784.2, 784.11; R645-301-231, -301-526, -301-528.

Analysis:

The Permittee is currently in the process of developing the West Lease coal reserves. As part of these development activities, boreholes drilled will access workings that were sealed in the 1970s. As such, the need has arisen to collect air sample data from behind these sealed workings.

The Permittee is proposing to drill 4 boreholes via a helicopter rig to assess the conditions in these older workings located in Mud Spring Hollow, a side canyon located approximately 700 feet to the northwest of Safeco's main surface facilities.

The helicopter rig will not require a pad site for each of the boreholes. The borehole disturbance area is estimated to be 0.003 acres each and will be reclaimed immediately after the conditions are assessed and upon the removal of equipment.

Temporary water tanks, water lines and pumps will be set up adjacent to each well then reclaimed once activities are completed. No mud pits are to be excavated. Water for drilling activities is to come from the surface facilities area and be pumped via a water line to the drill sites.

The drilling depths for the 4 boreholes range from 240 - 365 feet below grade. The Permittee does not intend to transfer the boreholes into water wells as allowed for in R645-301.631.

Findings:

[R645-301.631.200 & 641]: Reclamation of the boreholes will be required under the permanent case and sealing of boreholes regulations and performance standards as stipulated in the Utah Coal Rules.

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[R645-301.755 & 765]: The Permittee intends to reclaim the boreholes and not transfer their use for water wells. Boreholes must be permanently cased and sealed in accordance with the Utah Coal Rules as stipulated in the Utah Coal Rules.

RECOMMENDATIONS:

Conditional approval to install 4 boreholes via a helicopter rig should be approved provided that a follow up letter report with photodocumentation be submitted to the Division indicating that the boreholes were properly abandoned in accordance with [R645-301.631.200 - 301.641. -301.755 -301.765]

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